Human Behavior Course
2004

Eating Disorders

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HUMAN BEHAVIOR COURSE 2004
EATING DISORDERS - HANDOUT

LEARNING OBJECTIVES AND STUDY QUESTIONS FOR DISCUSSION.

1. **Know the meaning of the terms and concepts listed in slide one below.**
2. **What are the differences between normal eating and pathological eating that characterize the eating disorders?**
3. **Name the different eating disorders and whether they are very common (point prevalence > 5%), common (1-5%) or uncommon (<1%) in the general population.**
4. **Know whether each eating disorder is more common in men, more common in women, or occurs in a similar proportion of men and women.**
5. **What are the diagnostic features of anorexia nervosa?**
6. **What are the diagnostic features of bulimia nervosa?**
7. **What is the difference between bulimia nervosa and anorexia nervosa?**
8. **What are the stages of binging and purging that occur in bulimia nervosa?**
9. **Does binging and purging ever occur in anorexia nervosa?**
10. **Describe the key behavioral consequences of anorexia nervosa? Of bulimia nervosa?**
11. **Describe current understanding of the psychosocial pathogenesis of anorexia nervosa? Of bulimia nervosa?**
12. **Describe what is known about the neurobiological mechanisms of anorexia nervosa? Of bulimia nervosa?**
13. **Describe what is known about the potential medical complications of anorexia nervosa? Of bulimia nervosa?**
14. **What general type of psychotherapy works best for eating disorders? Name key techniques used and give an example of how each might be used to treat a patient with anorexia nervosa and one with bulimia nervosa.**
15. **What role do psychodynamic therapies play in the treatment of eating disorders?**
16. **What medications may be used to treat anorexia nervosa? Bulimia nervosa?**

Slide 1

Eating Disorders – Terms & Concepts

- anorexia nervosa
- bulimia nervosa
- culture-bound syndrome
- binge
- purge
- restrict
- appetitive phase
- consummation phase
- compensatory behavior
- Russell's sign
- autonomous dieting
- self-injury
- impulse control
- craving
- positive reinforcement
- negative reinforcement
- serotonin
- selective serotonin reuptake inhibitors
- fenfluramine (Pondimin®)
- cyproheptadine (Periactin®)
- norepinephrine
- endorphins
- exogenous opioids
- naloxone (Narcan®)
- naltrexone
- cholecystokinin (CCK)
- neuropeptide Y (NPY)
- peptide YY (PYY)
- leptin
- cortisol
- rebound hypoglycemia
- ideal body weight
- tricyclic antidepressants
- bupropion
- monoamine oxidase inhibitors

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EATING DISORDERS

What is an Eating Disorder?

Eating disorders are complicated psychiatric illnesses in which food is used to deal with unsettling emotions and difficult life issues. Patients with anorexia or bulimia are surprised to learn that food has very little to do with the underlying conflicts and family issues that lie at the heart of these disorders. The cause of eating disorders is unknown but is likely a combination of societal influences, psychological predisposition and biological vulnerability.

What is Anorexia?

Anorexia is an obsessive quest for thinness- an intense preoccupation with body weight and shape prompting very disturbed eating behaviors.

It is diagnosed when weight loss leads to a body weight of less than 85% of a healthy norm. There is an intense fear of gaining weight, becoming fat, and a disturbed comprehension of the meaning of weight and self worth along with the denial of the seriousness of the low weight. Menses cease for at least three consecutive cycles

There are two types: restricting and binge-eating purging type.

Personality changes include increased irritability, isolative behavior

Depression and anxiety are common as are obsessive-compulsive personality traits—

85% of cases begin during adolescent years. Somewhere between 0.5-5% of female adolescents will develop anorexia, a higher number Bulimia.

Anorexia has peaks around age 14 and age 18; bulimia—age 18

95% of the time anorexia begins with dieting but in anorexia behavior becomes autonomous –ultimately anorexia becomes one’s identity

Estimates from high school and college-age populations place the prevalence among women at 1%. The frequency in men is one tenth that. Women outnumber men ten to one.

ANOREXIA NERVOSA
from the
Diagnostic and Statistical Manual of Mental Disorders

Diagnostic criteria for 307.51 Anorexia Nervosa

A. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected).

B. Intense fear of gaining weight or becoming fat, even though underweight.

C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.

D. In postmenarcheal females, amenorrhea, i.e., the absence of at least three consecutive menstrual cycles. (A woman is considered to have amenorrhea if her periods occur only following hormone, e.g., estrogen, administration.)

Specify type:

Restricting Type: during the current episode of Anorexia Nervosa, the person has not regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)

Binge-Eating/Purging Type: during the current episode of Anorexia Nervosa, the person has regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas)

What is bulimia nervosa?

First named in 1979—considered a variant of anorexia

Binge-purge—twice a week over 3 months—similarly preoccupied with body size shape and weight—but within 5-10 pounds of normal weight—food has calming effect initially on anxiety and painful feelings—followed by guilt, shame, fear---

Defining feature is binge eating- sense of loss of control-eat until physically unable to continue or run out of food—followed by compensatory behavior—usually self-induced vomiting (80-90%) or fasting or exercise (10-20%) The bulimic patient is aware that relationship w/food and behavior is abnormal/out of control

Depression, anxiety common, Greater difficulty with impulse control—risky sexual behavior, alcohol and substance use---cycle of low self-esteem, depression, more self destructive behavior

The bulimic tends to be more anxious and then relieved when" discovered", more highly motivated in psychotherapy.

Diagnostic and Statistical Manual of Mental Disorders

Diagnostic criteria for 307.51 Bulimia Nervosa

A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:

(1) Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances

(2) a sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating)

B. Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting; or excessive exercise.

C. The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for 3 months.

D. Self-evaluation is unduly influenced by body shape and weight.

E. The disturbance does not occur exclusively during episodes of Anorexia Nervosa.

Specify type:

Purging Type: during the current episode of Bulimia Nervosa, the person has regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas

Nonpurging Type: during the current episode of Bulimia Nervosa, the person has used other inappropriate compensatory behaviors, such as fasting or excessive exercise, but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas

What is Binge Eating Disorder?
Binge eating disorder—recurrent episodes of binge eating without compensatory weight loss behaviors of Bulimia or anorexia. 1.5%-2% of the general population

Associated with obesity. Common among obese individuals seeking weight management — 70% of individuals in Overeaters Anonymous.

Why does someone develop an eating disorder?

Societal influences

Children as young as five have body image concerns and up to 80% of teenage girls worry about being overweight.
The years between puberty and young adulthood- ages 11 to 22- are the most vulnerable for the onset of anorexia. 7% of children between the ages of 8 and 11 score in the "anorexic range" of eating attitudes

Young women are supposed to do everything: be thin and beautiful, have husbands and children, have professions, power and money. Sexual freedom for girls and women in our culture has added to the anxiety of growing up. Physical obsession with their bodies and dieting may develop in young girls by eight or nine. Confusion, anxiety and concern about these multiple roles are believed to contribute to some girls focus on their appearance as a way to feel in control. Food and weight are entities that can be controlled.

Eating disorders are more common in industrialized nations.

Genetic Factors:
Family studies of anorexia—increased risk of mood disorders in first-degree relatives
as well as eating disorders
Bulimia-similar increased rates of mood disorders and eating disorders
Twin studies of both disorders show genetic effects—MZ versus DZ

Biological correlates

Disturbance in the central nervous serotinergic system—serotonin modulates eating behavior by producing feelings of fullness and satiety
Serotonin pathways also involve regulation of mood, impulses and obsessionality—both compulsive behaviors and impulsive behaviors are associated with lower serotinergic activity

Starvation is associated with cerebral atrophy in 82% of patients with anorexia—associated cognitive impairment characteristic of subcortical dementia

Individual personality characteristics, emotional features, cognitive style

Low self-esteem and perfectionism as well as the need for achievement, control and approval—perfectionistic, rigid, dependent and socially insecure.

Anorexics tend to be anxious-strive to please everyone and avoid conflict. Compliant, model children-rarely display teenage rebellion. Prevents recognition and expression of their own feelings—'fear of sexuality', avoid growing up
Bulimics may have any combination of these features but tend to be more emotional—impulsive and rejection sensitive--intense emotions that are confusing—more self-destructive behaviors—alcohol, drug abuse, sexual promiscuity or shoplifting

Both anorexics and bulimics have difficulty with a sense of developing their own beliefs, values and opinions—uncertain sense of self- identity

Turn to their bodies as an imagined means of coping with problems in their lives and to feel in control

Perfectionism in childhood is one of the risk factors for both anorexia and bulimia.

Family Characteristics

Family may play a prominent role in some patients but very little in others

Role of family is assumed as it is the backdrop—holding environment for the child-- but degree of impact uncertain—eating disorders are complex disorders

Difficulty with individuation and separation from family of origin noted

Individuation is person's ability to establish a separate identity—opinions, tastes, values and goals-distinct sense of self in spite of overlap with family's values

Family therapists describe these families as enmeshed (emotionally overinvolved with one another—'fused' identities)

Eating Disorders in Males

Largest discrepancy between males and females in diagnosis of psychiatric illnesses occurs among eating disorders: one male for nine-ten females.

Appearance does not define men in quite same way as women in our culture—attributes such as power, money and success are held in more esteem. Males entering puberty see

Appearance as important to sexual appeal—more concerned with shape versus weight—"buff"—males are depicted as more muscular over last 25 years—and body dissatisfaction is growing in a younger group of boys.

Associated depression and anxiety reported, greater unhappiness with their bodies, more confusion about their emotions; obsessive compulsive traits –preoccupied with orderliness, rules, details, perfectionistic. These traits cause anxiety as well as standards are impossible to meet.

An eating disorder in males as in females can bring relief or divert attention from difficult adolescent issues by focusing concerns on weight/ calories/food

Treatment

Course: Full recovery to death-rates 6-7% for anorexia—up to 20% over 20 years; bulimia much higher recovery rates 50-75%

25-40% have a good outcome; the rest have symptoms- such as a distorted body image or abnormal eating behaviors—20% chronically ill

Poor outcome associated with older age at onset, longer duration, severity (hospitalizations), comorbid personality disorder and poor premorbid adjustment

Treatment

1- Restore nutritional status
2- Modify distorted eating behaviors
3- Change disported, erroneous beliefs about weight

SSRIs decrease binge-purge (Prozac only one FDA approved for bulimia)

No effect on anorexia—unless comorbid mood disorder or OCD

Bupropion contraindicated (lowers seizure threshold)

Periactin or cyproheptadine a serotonin receptor antagonist may act on hypothalamic feeding center and prevent satiety

Medical consultation

Nutritional counselor—so psychotherapy does not focus on food and avoid underlying issues—educational/supportive focus

Individual, family therapy

Practical and goal oriented---insight focus later